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THE TRAINING OF ANIMALS.

BY JAMES E. LE ROSSIGNOL, PH. D.

A.—DOGS.

Professor Brewer of the Sheffield Scientific School has kindly loaned for the benefit of the writer the choicest of his invaluable collection of books on dogs. At the suggestion of Dr. Hall, the following notes have been prepared on these and several other works, and may be of interest to students of animal psychology.

Xenophon's Kynegetikus is the oldest known work on the subject. Among the Greeks different races of dogs were used for different kinds of game. For hares, Castorians and fox-dogs were used; for stag-hunting, Indian hounds, and for the wild boar, Indian, Cretan, Locrian and Laconian hounds. Chief attention is given to the coursing of hares. The dogs were not expected to catch the hare, but to drive it into nets which were set at certain places. The best dogs are those with a light head and blunt muzzle, prominent black shining eyes, broad forehead, long, flexible, round neck, broad chest, straight elbows. They must be strong, well-proportioned, swift of foot, and above all they must be keen-scented. Training must begin with young dogs. They should be kept in good health by nourishing food and plenty of exercise. The trainer himself should feed them, that they may become attached to him. When a pack is taken out to hunt, the older dogs are loosed first and then the younger are permitted to follow the scent with the others. They must usually be fed near the nets, that they may not wander too far from them, and they must be taught to drive the hare in that direction. If the scent be lost they must circulate until they find it again. As a reward the young dogs may be allowed to worry the hare. They are not to contract the habit of following foxes or any other animal than the hare. They should be taken out to hunt every two or three days, that they may become accustomed to the chase.

Arrian's Kynegetikus adds very little to what had been already said by Xenophon beyond recommending a few new races of hounds.

Of Englishe Dogges; a short treatise written in Latine by JOHANNES CAIUS, and newly done into Englishe by ABRAHAM FLEMING. London, 1576, pp. 44.

A curious book, in which the author, John Kay or Caius, gives his friend, Conrad Gesner, a description of the principal races of English dogs. It is interesting to notice that nearly all the chief races of the present time are mentioned by him.

Praktische Abhandlung von dem Leithund, CARL VON HEPPE. Angsburg, 1751, pp. 499.

No doubt at the time a valuable manual for huntsmen on the use of the led-hound. The hound was kept always in the leash and was used in tracking wild animals to their haunts. When once the game had been found a hunt was organized in the regular manner. The chief requisite for a led-hound is a keen scent. Training begins when the dog is but a few weeks old, and from that time he is in every way possible accustomed to the scent of the game he is intended to track. If it be deer, pieces of deer's flesh or skin are given him to smell and tear. When a little older he should be taken in the early morning to a place where the deer have lain during the night and encouraged to smell about and follow the scent as far as possible. Again, in a meadow a piece of warm bread or deer's flesh is trailed along the ground and the dog induced to follow the scent and allowed to eat what he finds. If he tries to find the scent in the wind his nose must be pressed down to the earth until he learns to sniff about on the ground. If he fails to follow the scent he is beaten, but if he does well he is caressed and rewarded. A tendency to chase birds or rabbits must at once be checked. He must be taught to love his master and always to obey his commands. He must be gradually accustomed to follow a weak scent by being kept at work until a late hour every day, when the sun has partially removed the scent. Restraining with the leash counteracts too great eagerness and prevents the dog from running over the scent, while words of encouragement and rewards tend to increase his ardor.

Ansführliche Geschichte der Hunde, ANON. Leipzig, 1781, pp. 374.

The author, who styles himself Kynophilus Actacon, begins his work with a chapter on the psychology of the dog. Dogs, as well as men, are either of choleric, melancholic, sanguine or mixed temperament. The chief faculties of the dog's *moral nature* are genius, instinct and memory. Genius is the power of quickly learning and comprehending anything. Dogs also possess the power of forming ideas, and exhibit attention and curiosity. The will is determined by innate tendencies or impulses, or in other words, by instinct, and forms the most important part of the dog's *moral nature*. Among the various impulses are desire for food, procreative impulses, impulse towards self-preservation, desire for amusement, exercise, fresh air, and for society. By means of these impulses the dog is impelled to eat, to mate, to hunt and fight and flee danger, to play and run and to associate with his kind and with men. It is by taking advantage of these impulses that man is able to train the dog in so many different ways. Dogs are trained by means of a judicious use of rewards and punishments, by the association of pleasant feelings with certain actions and painful feelings with others. The dog's own impulse towards self-preservation leads him to obedience, and when habits are formed rewards and punishments are no longer necessary. The training of dogs must be varied according to the ends to be attained, but the principles to be followed remain the same.

Der Hund, seine verschiedene Zuchten und Varietäten, DR. FRIEDRICH LUDWIG WALTHER. Giessen, 1817, pp. 96.

The chief characteristics which render the dog so useful to man are the keenness of his senses, his quickness of perception, his teachability, power of memory, faithfulness and obedience.

The General Character of the Dog Illustrated by Anecdotes, JOSEPH TAYLOR. London, 1821, pp. 150.

As with most anecdotes on canine sagacity, the lack of exactness and complete explanation of circumstances render it impossible to draw any safe conclusions from the instances here related.

Kunopædia; a Practical Essay on Breaking or Training the English Spaniel or Pointer, WILLIAM DOBSON. London, 1814, pp. 235.

The dog is to be gradually accustomed to obey certain commands by voice or gesture. Before being taken to the field the dog must learn to obey the commands, "come here" and "down." Obedience is rewarded by caressing, while the contrary is punished with the whip. After whipping, the master must make friends with the dog before letting him go, and he must never be chased, that he may not learn he is swifter than his master. The method used in the field is much the same as that given by Col. Hutchinson, except that more severe punishment is recommended. The great principle to be followed is that of complete obedience.

Canine Pathology, DELABERRE BLAINE. Lond. 1832, pp. 310.

This was the first scientific work on the subject and the author has been called the father of canine pathology.

The Dog, WILLIAM YOUATT. Philadelphia 1857, pp. 392.

A more complete work than the former and long the standard work on the subject.

The author thinks that in regard to intellectual powers the difference between the dog and man is in degree and not in kind. The brain of a man weighs about $\frac{1}{10}$ of the weight of his body, that of the Newfoundland dog $\frac{1}{60}$, while that of the bull dog weighs only $\frac{3}{160}$ of his entire weight. So great is the influence of heredity that instances have been known of dogs which at the age of a few months were self-broke and required no special training for the chase. If these induced habits, however, are not cultivated, they are soon lost. The pathology of the dog closely resembles that of man, both in the nature of the diseases and the mode of treatment. Between the mental conditions of the dog and of man in disease there would seem to be a striking parallel, especially in the case of hydrophobia.

The practitioner must understand the nature of the dog. He must be firm and courageous as well as kind and gentle in order to make the dog sensible of his power and of his good intentions. A sick dog often seems to realize that the doctor is endeavoring to relieve him, and will often lick the hand that for the moment causes him pain.

Vollständige Unterricht, alle Arten Hunde abzurichten, CHRISTIAN FRIEDR. GOTTL. THON. Ilmenau, 1832, pp. 296.

The trainer must be careful to select a dog of the proper race, size and temperament for the particular kind of hunting he is to learn. Still, the natural temperament of the dog may be greatly modified by careful training. The trainer must not only know the nature of the dog, but must exercise great care and patience. The dog must learn to know and love his master and the master must treat him kindly and never punish him too severely. Punishment should take place immediately on the commission of a fault, but should be in general by words rather than by whipping.

Training must proceed step by step from the simple to the more complex. Too much ought not to be attempted at once. Frequent repetition is necessary. As a reward for good behavior the lesson may be shortened, or it may be lengthened if the dog be lazy and disobedient. The lesson should take place when the dog is somewhat hungry, for then his faculties are on the alert.

Instruction must always be accompanied by words and the same words must always be used with the same meaning.

Dogs: Their Sagacity, Instinct and Uses, GEORGE FREDERIC PARDON. Lond. 1859, pp. 306.

The author defines instinct as "a faculty given to the lower animals instead of reason, a faculty that teaches them all they require to know, a governing principle that impels them to do all that is necessary for the preservation of their lives and the continuance of their species, and it operates without the aid of instruction or experience."

House Dogs and Sporting Dogs, JOHN MEYRICK, Lond. 1861, pp. 250.

A handbook intended for the use of dog-breakers. Methods of training must be adapted to the disposition of each particular dog. Some dogs are rendered vicious by whipping, while others require it to subdue their obstinacy.

The master should train his own dog. If training be carried on gradually and if each lesson be thoroughly learned before proceeding to the next, great progress may often be made in a short time. A retriever, for instance, is first taught to fetch and carry, then to follow the scent of a piece of meat that has been trailed along the ground, then to track a lame rabbit through long grass and to fetch it without injury, and finally to retrieve game in a similar manner. Many amusing tricks may easily be taught by taking advantage of some peculiar habit of a dog. If a dog be in the habit of standing on its hind legs for food, it can easily be taught to dance by holding food above its head. When two or three such tricks are learned, others are acquired much more rapidly.

Breeding, Training, Management, Diseases, etc., of Dogs, FRANCIS BUTLER. Brooklyn, 1879, pp. 391.

Almost every dog, the author thinks, is capable of a high degree of training, although some breeds, owing to heredity, seem more apt to receive instruction than others. Training should begin as early as possible, for it is much easier to teach right habits than to break off wrong ones. The dog should learn to obey from a desire to please his master rather than from a fear of punishment. Only one person, preferably the owner, should teach the dog, and a consistent system should be used, that the dog may not become confused at the different commands and methods. The same sign or word should always have the same meaning. The trainer should always show pleasure when an act is rightly performed and displeasure when a mistake is made. Advantage should be taken of the instinctive actions of dogs. Thus a puppy seems instinctively to run after things and carry them about, and a little training will teach him to do this at the word of command. Similarly, some dogs seem instinctively to take to the water, while others have an instinctive passion for hunting. Dogs have retentive memories and associations between commands and actions are easily formed, and thus a dog's *vocabulary* may gradually be enlarged.

Dog-Breaking, GENERAL W. N. HUTCHINSON. Lond. 1876, 6th Ed., pp. 348.

This book treats chiefly of the training of pointers and setters and is probably the best work on the subject.

The breaker should possess a thorough knowledge of dog natures. He should have perfect command of his temper and should use no severity. He should be consistent, that is, he should reward the dog for acting rightly, even when he has missed the game, and should not fail to punish a mistake even when the game has been bagged. He must act with reflection by considering what meaning the dog attaches to every sign and word and always using the same words with the same meaning.

Training should begin with young dogs at home. They must be taught to pay attention to the whistle and to obey certain words and signs. Of these, the word "toho," accompanied by raising the right arm, is the command to stand still; the word "on," with a forward under swing of the right arm, means that the dog is to advance in the direction indicated by the hand. "Drop," is the order to crouch. The orders should gradually be given in a low voice until finally the gesture alone is used. The dog must be accustomed to watch his master for commands. When these and several other commands have been well learned, the dog is taken to the field. He is expected to discover the bird by the taint in the air and not from the ground. Therefore he should enter the field at the leeward side. The trainer may use a check cord of from ten to twenty yards in length. On entering the field he sends the dog from him towards the wind by a wave of the hand or the word "on." The trainer makes the dog beat the field from side to side while he advances up the middle. When the dog has gone far enough in one direction, he is called back by a wave of the left hand or by a whistle, or, if necessary, he is pulled around by the check cord. As he passes, the trainer encourages him on in the opposite direction. When, by watching him, the trainer observes signs of his having scented a bird, he raises his right hand. If the dog does not stop the word "Toho" is given, and if he still refuses to stop the cord may be used and the dog pulled back to the place where he should first have pointed and there punished with constant repetition of word and sign until he obeys. If now the bird rises and the trainer fires, the dog must crouch at the word "down charge" and must remain in that position until his master has reloaded and given the word "seek dead," when the dog must find the game, yet is not allowed to take it in his mouth.

After a few weeks' practice with a careful trainer a dog will begin to acquire the proper habits of hunting. Much depends on the preliminary lessons, which should be thoroughly learned before more difficult feats are attempted.

The Dog; by Dinks, Mayhew and Hutchinson, FRANK FORESTER. New York, 1873, pp. 655.

A compilation of Dinks' book on the general management of dogs, Mayhew's *Canine Pathology* and Hutchinson's *Dog-Breaking*. Mayhew lays especial stress on the fact that the dog is essentially a nervous animal and that regard must be had to this both in the training of dogs and in the treatment of their diseases.

Die Hundezucht im Lichte der Darwinschen Theorie, GUSTAV LUNZE. Berlin, 1877, pp. 231.

Artificial selection and training by man have been the chief causes of the great variations now existing between the different

canine races. If left to themselves the different races would probably revert to a few types resembling some variety of wild dog.

Der Vorsteh-Hund, FRIEDR. OSWALD. Leipzig, 1873, pp. 290.

An exhaustive treatise on the training of the setter.

The American Kennel and Sporting Field, ARNOLD BURGESS. New York, 1876, pp. 201.

The essential qualities of a good hunting dog, says the author, are nose, staunchness, pace, endurance, intelligence and high-breeding. These should all be present in a proportionate and well-balanced degree. All of these characteristics are hereditary. Also the particular methods of hunting are hereditary. The progeny of a pointer shows a natural tendency to point game. Highly bred dogs also as a rule show greater intelligence than others. Therefore, in breeding, both parents should be of good stock and well accustomed to hunting.

It is best for a sportsman to break his own dog, for the dog becomes accustomed to the sound of his voice and his general manner and becomes attached to his first master as to no other. Also dogs always hunt best the birds they are broken on. In both these cases first impressions are the strongest and most enduring.

No set of rules will apply to all dogs, and there is a wide field for the exercise of common sense.

The Dog; with Simple Directions for his Treatment, "IDSTONE." London, 1872, pp. 252.

This is a standard work on dogs, chiefly descriptive of the different varieties. The English fox-hound is adduced as a remarkable example of the excellency to be obtained by careful breeding.

The Dogs of the British Islands, "STONEHENGE." London, 1892, pp. 279.

The editor, one of the greatest authorities on dogs, has collected from various reliable sources accounts of all the principal canine races.

Le Chien; d'après les Ouvrages de STONEHENGE, YOUATT, MAYHEW, BOULEY, HAMILTON SMITH, &C. Paris, 1876, pp. 330.

A valuable and condensed compilation from the works of the standard authorities on dogs.

The Dogs of Great Britain, America and other Countries. New York, 1879, pp. 366.

Compiled from two works by Stonehenge and some chapters by American writers.

The description of the German Dachshund is suggestive of the very different modes of treatment which must be used with different dogs. "Dachshunds are head-strong and difficult to keep under command; and, as they are at the same time very sensitive to chastisement, it is next to impossible to force them to do anything against their will. Many good badger dogs have been made cowards for life by one severe whipping. They must be taken as they are, with all their faults as well as their virtues."

The Practical Kennel Guide, GORDON STABLES. London, Paris, New York, pp. 200.

Dogs; their Origin and Varieties, H. D. RICHARDSON. New York, pp. 127.

Dogs; their Points, Whims, Instincts and Peculiarities, HENRY WEBB. London, pp. 347.

The author thinks the bad reputation of the bulldog to be largely the result of his being in general chained up and trained for fighting, and thinks him capable of being taught anything as well as any other breed. Out of eight bulldogs owned by a certain gentleman, six learned to retrieve by land or water, and only one was at all bad-tempered.

Dogs and their Ways, REV. CHAS. WILLIAMS. London, pp. 376.

Especial attention is drawn to heredity of acquired habits. A puppy of a dog who had been taught to beg, at the age of seven or eight months spontaneously took to begging for everything it wanted. Other curious illustrations are given of similar heredity.

Natural History of Dogs, Vols. 18 and 19 of the *Naturalists' Library*, by COL. CHAS. HAMILTON SMITH, pp. 566.

Chiefly a description with plates of the various canine races, including the wolf and jackal.

A Guide to Dog-Training. New York, pp. 105.

Dog and Gun, JOHNSON J. HOOPER. New York, pp. 105.

Des Hundefreund par Excellence, MATTHIAS ALISTA. Wien. pp. 73.

Die Dressur des Hundes, ED. ZBORZILL. Berlin, pp. 202.

The author is a professional dog-trainer. Many young dogs, especially those of hunting breeds, very early show a tendency to fetch and carry, and every young dog likes to run about with things thrown to him. When a ball or glove is thrown to him he must be induced to bring it to his master at the word "fetch," and lay it down at his feet. If he will not let it go it must be gently disengaged from his teeth and placed on the ground at the proper place. Then a piece of bread or meat should be given to the dog, and he should also be patted and praised. On a second trial he will be more likely to lay the glove at his master's feet, and after a few lessons he will always do it so. Little by little the lesson may be varied and more required, until the dog will seek anything at the word "seek," or will learn to run errands with a basket.

There should be no whipping at first, but in every case something to eat should be given the dog when he has done anything properly, and he will soon learn to take pleasure in trickperforming.

The most difficult tricks are only combinations of very simple performances. The so-called counting and spelling by dogs is taught by mechanical devices aided by words and signs which the dog learns to associate with the action required.

A dog is taught to walk or dance on his hind legs by placing him in the position and aiding him with a stick, or it may be taught by holding a piece of meat above his head. He may be taught to turn round on the floor by tying a bit of meat to his tail. He will shut the door with his fore paws if a piece of meat be so held that he must climb against the door to reach it. In every case words of command are used and in time the dog will obey the word without the device that was necessary at first.

Researches into the History of the British Dog, GEORGE R. JESSE. London, 1866, 2 vols. pp. 385-424.

A most valuable work from a literary and historical point of view.

The History of the Mastiff, M. B. WYNN. Melton Mowbray, 1886, pp. 222.

The author is of the opinion that the English mastiff has from the earliest times existed in Britain, and is the ancestor of the bulldog.

Histoire du Chien chez tous les Peuples du Monde, ELZÉAR BLAZE. Paris, 1843, pp. 460.

A valuable work, dealing chiefly with the question of canine sagacity. The characters of dogs show much greater variety than those of wolves and foxes, because of long association with man. The dogs of civilized nations show much higher development of character than those of savages. The disposition of the male is also very different from that of the female. The character of a dog depends on the education he has received, on the kind of people about him and especially on the conformation of his skull. Education can do much to change the natural disposition of a dog.

A dog is essentially a creature of habit. What it is in the habit of doing that it does with pleasure.

There are two factors in a dog's mental development, his own experience and his education. A dog with a wide experience like a collie is more intelligent than one whose experience is confined to his kennel and his master's yard. A large circle of ideas implies greater intelligence. One has but to watch the behavior of an old and a young dog while hunting to see how much a dog will learn by experience.

The author says with regard to inherited instincts: "The dog is instinctively a hunter. We have adopted certain varieties to hunt for us, and they have become more apt than other dogs, but it is none the less true that all dogs are hunters by nature."

Histoire physiologique et anecdotique des chiens, BÉNÉDICT HENRY RÉVOIL. Paris, 1867, pp. 394.

A very complete work, descriptive of all the principal canine races. The author believes the dog to have been domesticated by man from the very earliest periods. Some of the oldest Chinese, Indian, Assyrian and Egyptian writings mention the dog as a domestic animal. The hunting instincts of the wild dog still survive in the hound, and the great ferocity often exhibited in the chase would seem a temporary recurrence to savage life and habits.

Le Chien; Histoire Naturelle, avec un Atlas de 67 Planches et 127 Figures, EUG. GAZOT. Paris, 1867, pp. 546.

A more scientific work than the last. The origin of the dog is unknown, although the fact that dogs when crossed with wolves and jackals produce a fertile offspring, seems to point to a common origin of all three families.

The influence of heredity and education on the physical and mental development of the dog is very great. Judicious crossing tends to the development of strength and intelligence, and too much in-breeding acts in the opposite direction. There is in dog a continual tendency to degenerate, which comes into operation whenever the care of man is removed, and a "reversion to type" is ever imminent.

The author refers to Darwin's observation on the training of sheep dogs in Montevideo. When quite young the dog is removed from its mother and placed with the flock, where its entire life is to be spent. Frequently immense flocks of sheep are left at a distance of ten kilometres from any habitation, entirely in the care of these dogs. The affection they show for the sheep is remarkable.

The great value of watch-dogs depends chiefly on two faculties, their acute sense of hearing and the restlessness they feel when they hear the least strange sound. By properly directing these faculties a good watch-dog is produced. In the training of dogs habits are to be acquired through a repetition of experience. Mental and physical qualities must be developed together. The natural instincts of the dog form the basis of training. Commands are given by voice and hand and the dog is accustomed to associate certain actions with certain signs, obedience with reward, and disobedience with punishment. The trainer should often himself do what he wishes the dog to perform. Thus when a shepherd trains his dog to lie down at the word "down," he lies down himself and makes the dog do the same.

Patience and time are always necessary, but the dog's natural instinct and intelligence aid in the speedy formation of habits, and with succeeding generations, owing to the power of heredity, the work is less difficult.

The Dog in Health and Disease, WESLEY MILLS. New York, 1892, pp. 407.

A complete and valuable work chiefly in regard to canine pathology, but also containing a chapter on breeding and training. Dr. Mills says: "A puppy, full of life, tends to do exactly as his impulses urge him, till the highest motive power, a desire to please his master, is substituted." Training, therefore, is a question of the direction of impulses by the formation of pleasant and painful associations, leading finally to the establishment of the habits desired. With regard to the methods to be employed the author is in accord with the best authorities.